

## **R E M A R K S**

This Amendment is responsive to the Office Action that was mailed February 9, 2006, (hereinafter "Office Action") and the Interview Summary that was mailed March 7, 2006 (hereinafter "Interview Summary").

### **Statement Of The Substance Of The Interview**

Applicant extends his gratitude to Examiners Handal and Neckel and for the time and consideration that was extended to the Applicant during the telephone interview conducted on March 1, 2006.

The Interview Summary mailed March 7, 2006 appears to be complete and in compliance with M.P.E.P. §713.04 and 37 C.F.R. §1.133 and is incorporated herein by reference. Applicant believes that the portion of the Interview Summary that describes the substance of the interview is correct with the following clarification. The Interview Summary contains the sentence:

Applicant's cover is located along a side of the entire module, whereas Cleary's cover/baffle is positioned between reactor inlet (17) and inlet spiral passage (36).

Applicant believes this sentence should be revised as follows:

"Applicant's cover is located along a side of the entire module, whereas Cleary's ~~cover~~/baffle is positioned between reactor inlet (17) and inlet spiral passage (36)."

While baffle (26) is illustrated in Cleary as being located between reactor inlet (17) and inlet spiral passage (36), Cleary does not disclose a cover between reactor inlet (17) and inlet spiral passage (36). Moreover, it is the location of the flow distribution manifold between a cover and the reactor that distinguishes Applicant's claims 6 and 17 over Cleary. As such, Applicant's cover need only be characterized as being

located along a side of the module to establish the location of the flow distribution manifold.

### **Amendments to the Specification**

The specification is amended to insert reference number "315" to refer to the cover. Such an amendment was proposed during the interview to clarify the location of the recited cover. See Interview Summary, continuation sheet, page 3. Failure to include this reference number in the specification as filed was inadvertent error.

This amendment does not introduce new matter because the referenced cover is clearly illustrated in FIG. 3B and is described in detail in the specification on page 11, lines 21-27.

### **Amendments To The Claims**

Claim 6 has been amended to recite that the autothermal reforming module further includes a cover fitted to a side of the reforming module and that the flow distribution manifold is disposed between the reactor and the cover. Such an amendment was proposed during the interview to clarify the location of the recited cover. See Interview Summary, continuation sheet, page 3. Support for this amendment can be found on page 11, lines 21-27 and in FIGs. 3A and 3B. No new matter is introduced by the amendment.

Claim 17 has been amended to recite that the module includes a cover fitted to a side of the module and that the flow distribution manifold is disposed between the reactor and the cover. Such an amendment was proposed during the interview to clarify the location of the recited cover. See Interview Summary, continuation sheet, page 3. Support for this amendment can be found on page 11, lines 21-27, in FIGs. 3A and 3B, and in original claims 2 and 4.

Claim 22 has been amended to complete the claim and in particular to recite that the flow collection manifold "is centrally disposed." Support for the amendment can be found on page 9, lines 19-30, page 10, lines 1-2, page 11, lines 24-31, page

12, lines 1-15, and in FIGs. 3A and 3B. No new matter is introduced by this amendment of claim 22.

**Claim Rejections Under 35 U.S.C. §103(a)**

Claims 6-11 and 17-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,326,537 ("Cleary") in view of U.S. Patent No. 4,438,691 ("McShea").

Claim 6 has been amended to recite among other features that the module includes a cover fitted to a side of the reforming module and that the flow distribution manifold is disposed between the reactor and the cover for evenly distributing flow into the reactor. The Interview Summary contains the statement that such an amendment would appear to overcome the rejection of claims 6 and 17. See Interview Summary, continuation sheet, page 3. Claims 6-11 are believed to be patentable over Cleary in view of McShea and in condition for allowance. Reconsideration and withdrawal of this rejection is respectfully requested.

Claim 17 has been amended to recite among other features that the module includes a cover fitted to a side of the module and that the flow distribution manifold is disposed between the reactor and the cover for evenly distributing flow into the reactor. The Interview Summary contains the statement that such an amendment would appear to overcome the rejection of claims 6 and 17. See Interview Summary, continuation sheet, page 3. Claims 17-18 are believed to be patentable over Cleary in view of McShea and in condition for allowance. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 19 and 20 are directed to a module for use in a fuel processor and recite among other features that the module includes a reactor inlet piping in fluid communication with an inlet spiral passage and a flow distribution manifold. It is the position of the Office that Cleary discloses an inlet spiral passage and a flow distribution manifold. However, when taken separately or in combination, Cleary and McShea do not teach or suggest a module that comprises an inlet spiral

passage, a reactor inlet piping in fluid communication with the inlet spiral passage, and a flow distribution manifold in fluid communication with the reactor inlet piping. More specifically with respect to the Cleary reference, there is no suggestion that the disclosed reactor should be modified to include reactor inlet piping or any other pipe-type structure that would be in fluid communication with inlet flow passage (36) and inlet plenum (13). In the absence of such a teaching or suggestion, claims 19 and 20 are not unpatentable over Cleary in view of McShea. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 21-23 are directed to a module for use in a fuel processor and recite among other features that the module has a circular cross sectional configuration and that the flow distribution manifold is centrally disposed for evenly distributing a flow into the reactor. It is the position of the Office that Cleary discloses an inlet spiral passage and a flow distribution manifold. However, Applicant would point out that there is no teaching or suggestion in either Cleary or McShea that a flow distribution manifold should be centrally disposed. To the contrary, Cleary teaches that the reactor module should have a central catalyst core (15) and that the inlet spiral should open into an inlet plenum (13). As illustrated and described in Cleary, inlet plenum (13) is disposed between the inlet flow passage (36) and the central catalyst core (15). As a result, when taken separately or in combination with one another, Cleary and McShea fail to teach or suggest a module having a circular cross sectional configuration and a centrally disposed flow distribution manifold for evenly distributing a flow into the reactor. Claims 21-23 are believed to be patentable over Cleary in view of McShea. Reconsideration and withdrawal of this rejection is respectfully requested.

#### **Correction of the Drawings**

Applicants attach to this Amendment a replacement sheet for FIG. 3B. Reference number 315 and an associated lead line have been added to FIG. 3B to indicate the location of the cover so as to be consistent with the amendment to the

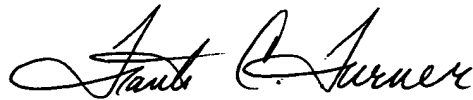
specification noted above. Such an amendment was proposed during the interview to clarify the location of the cover element. See Interview Summary, continuation sheet, page 3. No new matter is introduced by this amendment and failure to include such a reference number in the drawings as filed was inadvertent error.

\* \* \* \* \*

All of the stated grounds of objection and rejection are believed to have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Frank C. Turner", is written over a horizontal line.

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